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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/501,663	02/10/2000	Takayuki Uchiyama	105399	4219

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OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

MISLEH, JUSTIN P

ART UNIT	PAPER NUMBER
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2612

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DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/501,663

Applicant(s)

UCHIYAMA, TAKAYUKI

Examiner

Justin P Misleh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 - 16 is/are allowed.
- 6) ☒ Claim(s) 1 - 6 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The specification is objected to because of an inconsistency therein.

On page 15 (line 17), the specification states, “the shield plate 24 ...”; however, in other instances, “the shield plate” is labeled as “the shield plate 124”.

Appropriate correction is required.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

3. The drawings are objected to because of an inconsistency with the specification. More specifically, figure 4 shows “the shield plate” labeled with reference sign “24”; however, after examination of the disclosure, the Examiner has determined that “ the shield plate” should be labeled with reference sign “124”.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1 – 5** are rejected under 35 U.S.C. 102(e) as being anticipated by Fujimoto et al.

For the following rejections, please refer to figures 11 – 14 and as stated in columns 9 (lines 34 – 41 and 57 – 67), 10 (lines 1 – 7 and 49 – 67), 11 (lines 1 – 40 and 58 – 67), 12 (lines 9 – 32 and 52 – 67), and 13 (lines 1 – 27).

6. For **Claim 1**, Fujimoto et al. disclose, an electronic camera comprising:

an image-capturing element (plurality of individual light receiving elements – 79) that receives subject image light (reflected from subject by means of cold-cathode tube 3) entering into a camera body (comprised of container 1 and cover member 2) through a taking lens (plurality of individual rod lenses 60);

a holder (attachment 99) that holds said image-capturing element (light receiving elements – 79) in said camera body (comprised of container 1 and cover member 2);

a circuit board (printed circuit board 7) mounted with a circuit that drives said image-capturing element (light receiving elements – 79);

a shield plate (shield member 5B) provided to cover said circuit board (printed circuit board – 7); and

a conductive elastic body (52) that is clamped and becomes deformed between said shield plate (shield member 5B) and a conductive portion (shield member 5A) achieving a large grounding capacity (see column 11, lines 39 and 40; and column 12, lines 27 – 32).

7. As for **Claim 2**, Fujimoto et al. disclose, an image-capturing element comprised of a plurality of individual light receiving elements (79) and, in addition, a taking lens that is comprised of a plurality of individual rod lenses (60). Thus, an individual light receiving element (79) and individual rod lens (60) combination is equivalent to an individual camera unit since camera body (comprised of container 1 and cover member 2) is provided for the plurality of combinations. Furthermore, the position and shape of the shield plate (shield member 5B) is clearly shown in figure 11. The position and shape of the shield plate (shield member 5B) within the camera body (comprised of container 1 and cover member 2) varies at locations on the shield plate (shield member 5B) labeled as 52 and 54. The individual camera units corresponding to the locations along the shield plate (shield member 5B) wherein labels 52 and 54 exist are different that the individual camera units corresponding to the locations along the shield plate (shield member 5B) wherein labels 52 and 54 do not exist and thus, the position of the shield plate (shield member 5B) in the camera body (comprised of container 1 and cover member 2) varies among individual camera units.

8. As for **Claim 3**, Fujimoto et al. disclose, as shown in figures 12 – 14 and stated in column 11 (lines 58 – 67), electronic camera according to Claim 2, wherein:

a body-side mounting surface (surfaces 16a/b and 17a/b) of said camera body (comprised of container 1 and cover member 2) to which said holder (99) is mounted is machined to establish a specific distance from an image forming plane (1a);

a holder-side attaching surface (surfaces 53a/b/c) of said holder (99) that is attached to said body-side mounting surface (surfaces 16a/b and 17a/b) is machined to establish a specific distance from a light-receiving surface of said image-capturing element (plurality of individual light receiving elements – 79); and

when said holder (99) mounted at said camera body (comprised of container 1 and cover member 2), the light-receiving surface of said image-capturing element (plurality of individual light receiving elements – 79) is aligned with the image-forming plane.

9. As for **Claim 4**, Fujimoto et al. disclose, as stated in column 11 (lines 27 – 34), an electronic camera of Claim 1, wherein said shield plate (shield member 5B) has enough strength (stainless steel) to prevent said shield plate from becoming unduly deformed by a pressure resulting from deformation of said conductive elastic body (52).

10. As for **Claim 5**, Fujimoto et al. disclose, as stated in column 11 (lines 27 – 34), an electronic camera of Claim 1, wherein said shield plate (shield member 5B) is constituted of a metal sheet (stainless steel).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. in view of Gammon.

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13. As for **Claim 6**, Fujimoto et al. disclose a shield plate (shield member 5B) wherein the shield plate (shield member 5B) is provided to cover a circuit board (printed circuit board 7), as shown in figure 12. Fujimoto et al. also disclose wherein a conductive body (52) is clamped and becomes deformed between the shield plate (shield member 5B) and a conductive portion (shield member 5A). However, Fujimoto et al. do not disclose wherein the conductive elastic body is provided at a periphery of said shield plate to fill a gap formed between said shield plate and said circuit board. On the other hand, Gammon also discloses a circuit board and shield plate. As shown in figures 1 – 3, Gammon discloses a circuit board (22) and a shield plate (32) so that the shield plate (22) covers the circuit board (22). As shown in figure 5, Gammon discloses a conductive elastic body (gasket 45) that is inserted into a groove portion along the periphery of the shield plate (30). The periphery of the shield plate (30) wherein the groove and conductive elastic body (45) reside is placed along a grounded trace (27) of the circuit board (22) so as to fill all gaps between the shield plate (30) and the circuit board (22). As stated in column 7 (lines 40 – 44), at the time invention was made, one with ordinary skill in the art would have been motivated to include the teaching of placing the conductive elastic body along a periphery of the shield plate, as taught by Gammon, in the electronic camera, of Fujimoto et al., as means to provide a continuous ground around the periphery of the shield plate. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included the teaching of placing the conductive elastic body along a periphery of the shield plate, as taught by Gammon, in the electronic camera, of Fujimoto et al.

Allowable Subject Matter

14. **Claim 7** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As for **Claim 7**, while the prior art discloses a conductive elastic body that is clamped and becomes deformed between a shield plate and a conductive portion achieving a large grounding capacity and also placing the conductive elastic body along a periphery of the shield plate so as to fill any gaps between the shield plate and the circuit board, the prior art does not teach or fairly suggest wherein the camera body, of which the shield plate, circuit board, and conductive elastic body reside, includes a front cover and a rear cover and that conductive elastic body shields a gap at an area where the front cover and the rear cover are joined, from the circuit board.

15. **Claims 8 – 16** are allowed. The following is a statement of reasons for the indication of allowable subject matter:

For **Claim 8**, while the prior art discloses an image-capturing element, a holder that holds the image-capturing element in a camera body, a circuit board, a shield plate that covers the circuit board, and a conductive elastic body that is clamped and becomes deformed between the shield plate and a conductive portion; the prior art does not teach or fairly suggest wherein the conductive elastic body is clamped and pressed between the shield plate and a conductive portion of the camera body.

For **Claim 13**, while the prior art discloses an image-capturing element, a holder that holds the image-capturing element in a camera body, a circuit board, a shield plate that covers

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the circuit board, and a conductive elastic body that is clamped and becomes deformed between the shield plate and a conductive portion; the prior art does not teach or fairly suggest a first shield plate having an opening to allow wiring from the circuit board to drawn around and to cover the circuit board and a second shield plate that covers the first shield plate so as to cover the wiring opening and wherein the conductive elastic body is clamped and pressed between the first and second shield plates and a conductive portion of the camera body.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art made of record was cited for the following reasons:

Cited **Prior Art Reference B** through Cited **Prior Art Reference G**, as labeled on PTO – 892 included in this Office Action, disclose an electronic circuit disposed on a printed circuit board or substrate wherein a shielding plate is provided to shield the electronic circuit from electrical interference, including electromagnetic fields and the like. The shielding plate is disposed so as make contact, at all the peripheral edges of the shielding plate, with the printed circuit board. A conductive medium, including foam, rubber, elastic, and the like, is inserted into a groove along the peripheral edges of the shielding plate so as to reside between the shielding plate and the printed circuit board. A ground trace on the printed circuit board is provided at all the locations wherein the shielding plate and conductive medium reside so as to ground the shielding plate to prevent electrical interference from adversely affecting the electronic circuit.

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Cited **Prior Art Reference H** through Cited **Prior Art Reference L**, as labeled on PTO – 892 included in this Office Action, disclose an electronic device comprising a several electronic circuits housed within a housing wherein the electronic circuits are disposed upon a printed circuit board or substrate and positioned by means of rubber, foam, elastic, and like to position the electronic circuits within the housing. Additionally, the rubber, foam, elastic, and the like are provided to absorb shock inflicted upon the housing.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 703.305.8090. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 5:30 PM and on alternating Fridays from 7:30 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy R Garber can be reached on 703.305.4929. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM

March 11, 2004


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600